D.T.E. 00-63-A

Petition of NSTAR Electric Company for approval by the Department of Telecommunications and Energy of a three-year Energy Efficiency Plan covering the period 2000-2002.

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FOR: NSTAR ELECTRIC COMPANY
Petitioner

I. INTRODUCTION

On June 13, 2001, the Department of Telecommunications and Energy ("Department") directed NSTAR Electric Company[1] ("Company" or "NSTAR") to file an updated energy efficiency budget and specific performance incentive goals for 2002. Boston Edison Company, Cambridge Electric Company and Commonwealth Electric Company, D.T.E. 00-63, at 8 (2001) ("D.T.E. 00-63"). On April 10, 2002, pursuant to D.T.E. 00-63 (2001), G.L. c. 25, § 19, G.L. c. 25A, § 11G, and Order Promulgating Final Guidelines to Evaluate and Approve Energy Efficiency Programs, D.T.E. 98-100 (2000) ("D.T.E. Guidelines"), NSTAR filed with the Department a 2002 Update ("Update") to its three-year Energy Efficiency Plan ("Plan") that covered the period 2000-2002. The Department reviews this Update in the docket in which the Plan was approved, D.T.E. 00-63.

On April 23, 2002, pursuant to G.L. c. 25A, § 11G, 225 C.M.R. § 11.00 and the D.T.E. Guidelines at § 6.2, the Commonwealth of Massachusetts, Division of Energy Resources ("DOER"), filed a report on the Update with the Department ("DOER Report"). The DOER Report concluded that the Update is substantially consistent with the statewide energy efficiency goals required by G.L. c. 25A, § 11G, and with DOER's Guidelines for energy efficiency programs (DOER Report at 2). See Guidelines Supporting the Massachusetts Division of Energy Resources Energy Efficiency Oversight and Coordination Regulation 225 C.M.R. 11.00.

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[1] Boston Edison Company, Cambridge Electric Company and Commonwealth Electric Company have combined to form NSTAR Electric Company.

On September 25, 2002, pursuant to the D.T.E. Guidelines at § 1(2), NSTAR filed a motion requesting approval of a performance incentive calculation and rate that differs from the method proposed in D.T.E. Guidelines at § 5 ("Motion"). The Company responded to sixteen Department information requests. On September 30, 2002, DOER filed a letter ("DOER Letter") with the Department stating that, with the revised shareholder incentive proposal, the Update remains substantially consistent with the statewide energy efficiency goals and DOER's Guidelines for energy efficiency programs.[2]

II. STANDARD OF REVIEW

The Department is required to ensure that energy efficiency activities are delivered in a cost-effective manner utilizing competitive procurement processes to the fullest extent practicable. G.L. c. 25, § 19; G.L. c. 25A, § 11G. The Department has established Guidelines that, among other things, set forth the manner in which the Department would review ratepayer-funded energy efficiency plans in coordination with DOER, pursuant to G.L. c. 25, § 19 and G.L. c. 25A, § 11G. D.T.E. 98-100.

DOER has the authority to oversee and coordinate ratepayer-funded energy efficiency programs, consistent with specified goals, and is required to file annual reports with the Department regarding proposed funding levels for said programs. G.L. c. 25A, § 11G; 225 C.M.R. §§ 11.00 et seq. If the DOER report concludes that ratepayer-funded energy

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[2] On its own motion, the Department moves the Update, the Motion, and NSTAR's sixteen responses to Department information requests into the record of this proceeding. The responses are marked as Exhs. DTE-5-1 through DTE-5-14, DTE-6-1 and DTE-6-2. The Department also incorporates by reference into the record of this proceeding the DOER Report and the DOER Letter. 220 C.M.R. § 1.10(3).

efficiency programs are consistent with state energy efficiency goals, and if no objection to the DOER report is raised, the Department's review of the Plan is limited to cost-effectiveness issues and the use of competitive processes. D.T.E. Guidelines at § 6.2; 225 C.M.R. § 11.2.

III. ENERGY-EFFICIENCY PROGRAMS

A. Summary of Programs

The Update proposes an overall energy efficiency program budget of approximately $61.2 million in 2002 (Update, Table 2). The budget provides for an additional $3.27 million in shareholder incentives based on actual performance compared to the 2002 goals (id. at 2, 5-14).[3] The Plan provides for energy efficiency programs for residential and business customers, in the process seeking, among other things, to transform markets for energy efficiency products and to capture savings during new construction, major renovation, and equipment replacement (id. at I-1 through I-5).

B. Cost-Effectiveness

NSTAR expects benefit/cost ("B/C") ratios for its year 2002 programs to exceed 1.00 (id., Table 6-2). More specifically, NSTAR projects B/C ratios for its year 2002 programs to average 2.45 for ordinary residential customers, 1.76 for low-income customers, and 3.09 for business customers (id.). In all, NSTAR expects the average B/C ratio for its 2002 programs to be 2.25 (id.). However, NSTAR expects B/C ratios of only 1.01 and 1.03 for the Energy Star Appliances and Residential High Use programs (id.). On the other hand, NSTAR reports

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3 The 2000-2002 Plan estimated a budget of $50.3 million for 2002, including shareholder incentives. D.T.E. 00-63, Table 1.

that in 2000 and 2001, actual benefits for those programs exceeded expected benefits by one percent while actual expenditures were 14 percent less than planned (Exh. DTE-5-10).

C. Competitive Procurement

NSTAR states that it out-sources 93 percent of its marketing and 99.9 percent of its program implementation (Update, Table 3). NSTAR competitively procures most of its marketing and program implementation, except for low-income programs[4] and some marketing to businesses (id.). NSTAR explains that experienced NSTAR staff market programs to businesses and trade allies (such as equipment wholesalers) though one-to-one contacts (Exh. DTE-5-6). NSTAR also out-sources and competitively procures 66 percent of its market research and evaluation activities (Update, Table 3). NSTAR conducts 97 percent of program planning and administration in-house (id.).[5]

IV. Shareholder Incentive Level

A. NSTAR's Motion

A company's shareholder incentive is tied to the rate on three-month Treasury bills ("T-bill rate"). D.T.E Guidelines at § 5.3. NSTAR maintains that very low T-bill rates in the last year, over which the Company has no control, do not "allow for a performance incentive that can motive the company in a meaningful way"(Motion at 2). NSTAR, pursuant to the D.T.E. Guidelines at § 1(2), proposes that the incentive calculation algorithm be modified for 2002

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4 Implementation of low-income programs must be sole-sourced to the low-income weatherization and fuel assistance network, pursuant to G.L. c. 25, § 19.

5 NSTAR conducts most planning and administration internally in order to effectively monitor energy efficiency activities and provide timely regulatory support. D.T.E. 00-63, at 6, citing Exh. DTE-1-10.

(Motion at 2; Update at II-4). NSTAR proposes a target after-tax shareholder incentive for successful program implementation, based on achieving 37 design level performance goals, that is 4.25 percent of its overall budget (Motion at 2; Update, Table 5). The 4.25 percentage is higher than the average T-bill rate of 1.87 percent over the last 12 months, but lower than the average 5.20 percent incentive that NSTAR has earned over the most recent five years (Motion at 2; Exh. DTE-6-1). NSTAR states that, with the proposed incentive levels, its programs are actually slightly more cost-effective than with incentives set at the T-bill rate (Exh. DTE-6-2). NSTAR notes that the stakeholders in its Energy Efficiency Programs support the Motion (Motion at 1).[6]

B. DOER Letter

DOER supports the Company's proposal (DOER Letter at 2). DOER concludes that the proposal is adequate to motivate the Company to pursue the highest quality programs for ratepayers, as envisioned by the Legislature (id.). DOER believes that the present T-bill rate, which is no longer four to six percent (the rate of return on low-risk investments cited in D.T.E. 98-100), but around 1.7 percent, will not adequately motivate the Company to provide high quality energy efficiency programs (id.). Therefore, DOER recommends that the Department allow NSTAR's proposed method to calculate the Company's 2002 shareholder incentive, pursuant to the D.T.E. Guidelines at § 1(2) (id.).

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6 These stakeholders include the Northeast Energy Efficiency Council; the Energy Consortium; the Low-Income Energy Affordability Network; and the Associated Industries of Massachusetts (Motion at 1).

V. ANALYSIS AND FINDINGS

A. Cost-Effectiveness

NSTAR provided expected B/C ratios for its proposed programs for the year 2002 to show that all programs have expected B/C ratios are greater than 1.00. Even when they barely exceed 1.00 for two programs, NSTAR's 2000-2001 experience suggests that the programs may turn out to be a little more cost-effective than the Company projects (Update, Table 6-2). An Energy Efficiency Program shall be deemed cost-effective if its benefits are equal to or greater than its costs, as expressed in present value terms. DTE Guidelines at § 3.5. The Department has reviewed the method by which the Company determined the benefits and costs for the Update and finds that the benefits and costs were determined consistent with Department criteria for establishing program cost-effectiveness. DTE Guidelines at §§ 3-4. Therefore, the Department concludes that the programs listed in the Update are cost-effective. However, the Department directs the Company to seek ways to improve the cost-effectiveness of the programs whose expected B/C ratios are barely greater than 1.00.

B. Competitive Procurement

NSTAR out-sources almost all of its marketing and program implementation, with a modest role for experienced NSTAR staff to market programs to businesses one-on-one. NSTAR competitively procures most of its market research and evaluation activities. At the same time, NSTAR conducts planning and administration in-house to monitor program activities (Update, Table 3). In light of the above, the Department finds that the Update provides for competitive procurement to the fullest extent practicable.

C. NSTAR Motion

When an entity seeking Department approval of its Plan requests a different method from that specified in the Guidelines, the burden falls on that entity to demonstrate the compelling nature of such a request. D.T.E. Guidelines at § 1(2). NSTAR has requested a different method to calculate its incentive for the 2002 program year. The Department has recognized that the size of an incentive must balance promoting good program management with benefitting ratepayers by directing most of the budget to program implementation. See, Order Promulgating Proposed Guidelines to Evaluate and Approve Energy Efficiency Programs, D.T.E. 98-100, at 37 (1999). DOER, the agency charged by the Legislature with much of the oversight of energy efficiency programs, has agreed that offering an incentive is needed to motivate companies to manage their energy efficiency programs well. Id. at 35. DOER maintained that an incentive of four to six percent, equal to a three to four percent risk-free inflation-adjusted rate of return plus an inflation rate of one to two percent, would be sufficient to motivate electric companies to manage energy efficiency programs well. Id. at 36. DOER stated that the then-recent T-bill rate fell in the required four to six percent range. Id.

In choosing the T-bill rate for the D.T.E. Guidelines, the Department considered DOER's advice that the T-bill rate would approximate the risk-free rate required to motivate electric companies to manage energy efficiency programs well. In this proceeding, the Company and DOER have made it clear that the T-bill rate is now much lower than the rate recommended by DOER in D.T.E. 98-100. While the proposed 4.25 percent target exceeds the rate now implicit in the D.T.E. Guidelines, it is not only lower than the percentage the

Company earned in recent years, it is near the low end of the range that DOER three years ago deemed sufficient to induce electric companies to manage programs well. The Department reaffirms that an incentive must be large enough to promote good program management, but small enough to leave almost all of the money to directly serve customers. The Company's proposal balances these two objectives and is consistent with the DOER information that the Department used in writing the D.T.E. Guidelines. Accordingly, the Department grants the Company's request for an exception to the D.T.E. Guidelines for the calendar year 2002.

D. Benefits of Market Transformation Programs

In calculating the benefits of market transformation programs, savings from any energy equipment expected to be installed in the future due to a current program shall be distinguished from savings from such equipment installed to date. D.T.E. Guidelines at §§ 4.2.1(b) and 4.2.2(b). The Department has required companies to measure how accurate projected equipment lifetimes have turned out to be, using observations several years later of actual equipment lifetimes and failure rates. See e.g., Boston Edison Company, D.P.U. 90-335, at 110-111 (1992); see also Boston Edison Company, D.P.U. 96-1-CC, at 20 (1996). Similarly, the Department will require companies, including NSTAR, to jointly track actual equipment installations or sales after a market transformation program ends and compare those to their earlier projections of the same. NSTAR and other companies may also track and report other measures of market transformation, such as changes in building or equipment efficiency codes, models offered by manufacturers, or emergence of significant new market players.

E. Conclusion

As noted, the DOER Report and DOER Letter concluded that the Update is substantially consistent with DOER's statewide energy efficiency goals. The Department found above that the Company's 2002 Update is cost-effective and provides for competitive procurement to the fullest extent practicable. Accordingly, the Department approves the Company's 2002 Update. Finally, the General Court has mandated that funding for energy efficiency programs continue through 2007. G.L. c. 25, § 19. Accordingly, the Department directs the Company to file its Plan for its future energy efficiency activities by February 23, 2002.

VI. ORDER

Accordingly, after due notice, opportunity for public comment, and consideration, it is hereby

ORDERED: That the Petition of NSTAR Electric Company for approval of the Update to their energy efficiency plan is APPROVED; and it is

FURTHER ORDERED: That NSTAR Electric Company follow all other directives contained in this Order.

By Order of the Department,

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Paul B. Vasington, Commissioner

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James Connelly, Chairman

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W. Robert Keating, Commissioner

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Eugene J. Sullivan, Jr., Commissioner

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Deirdre K. Manning, Commissioner

TABLE 1. NSTAR Energy Efficiency Budget ($000) and Planned Benefit/Cost Ratios

	2002	
	Budget	B/C Ratio
Residential		
New Construction (Energy Star Homes)	2,362	2.26
In-Home Services		
High Use	2,772	1.03
Residential Conservation Service (RCS)	1,502	1.21
Products and Services		
Lighting	3,583	13.61
Energy Star Appliances	1,249	1.01
Research & Development, Collaborative Planning	187	NA
Subtotal Residential	11,655	2.45
Low-Income		
New Construction	845	2.23
Single-Family	2,452	1.30
Multi-Family	1,821	1.32
Research & Development, Collaborative Planning	70	NA
Subtotal Low Income	5,188	1.76
Commercial / Industrial		
New Construction	7,619	5.48
IRM Lost Opportunity	4,581	§
Retrofit	7,487	3.58
IRM Large C/I Retrofit	3,580	§
Small C&I	8,212	2.52
IRM Small C&I Retrofit	2,501	§
Market Transformation Initiatives - Motor Up, Cool Choice, Design Lights, Compressed Air, O&M and Building Codes Training	1,645	†
IRM Program Payments - Early Buyouts of Future Payments	6,517	§
ENCORE - Payments for Past Program Services	3,894	§
Pilot Programs - Demand Response & Re-Commissioning	1,129	†
Research & Development	484	NA
Subtotal Commercial/Industrial	47,649	3.09
TOTAL BUDGET	64,491	2.25

Source: Update, Tables 2 and 6

† Benefits included in other C/I programs.
§ Benefits included in earlier years, when programs were implemented.